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On June 28, 2002

Shirley Dunne
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT EXAMINING OPERATIONS**

Group Art Unit 2635

In re patent application of Kraig M. Lujan et al.

Application Number 10/052,289, filed 01/18/2002

FOR: ELECTRONIC METHOD AND APPARATUS FOR DETECTING AND
REPORTING DISLOCATIN OF HEAVY MINING EQUIPMENT

INTERIM AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Responsive to the Notice to File Corrected Application Papers dated 05/08/2002 (a copy of which is enclosed), and pursuant to C.F.R. §1.121, enclosed are two pages indicating minor corrections to paragraphs 23 and 26 of the Application referenced above. Page 3 has paragraphs 23 and 26 typed with revisions indicated. Page 4 has paragraphs 23 and 26 in clean form.

Also enclosed as Page 5 for convenient reference by the Examiner is a printed listing of reference numbers in numerical order and the parts in the drawings to which they refer.

Respectfully submitted,


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{23} Each adapter 22 has upper and lower legs 23, 25, which fit around the leading edge 16 of the bucket 14. Upper leg 23 has a hole 24 therethrough, while lower leg or flange 25 has a hole 26 therein. An adapter attachment pin 20 secures each adapter 22 to the leading edge 17 16 of bucket 14 through the aligned holes 24, 26.

{26} Each transducer assembly 50 is housed within the aluminum inner can 42. A plunger housing 43 is also associated with and contained within the inner can 42. A flat printed circuit board 54, best seen in Figs. 3 and 4, divides the interior of the aluminum can into two semi-cylindrical compartments. One such compartment receives a battery 56 55 and circuit board 54 while the other compartment receives the plunger housing 43.

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LUJAN, SN 10/052,289

| | | | |
|-----|---|----|------------------------------|
| 10 | SHOVEL | 43 | PLUNGER HOUSING |
| 12 | CAB | 44 | PLASTIC CAP FOR HOUSING, #40 |
| 14 | BUCKET | 46 | WELD |
| 15 | HOLE IN BUCKET FOR ADAPTER ATTACHMENT PIN, #20 | 47 | GROMMET, UPPER |
| 16 | EDGE OF BUCKET | 48 | GROMMET, LOWER |
| 17 | RECESSES IN BUCKET EDGE #16, TO RECEIVE TRANSDUCER | 50 | TRANSDUCER ASSEMBLY |
| 20 | ADAPTER ATTACHMENT PIN | 51 | PLUNGER |
| 22 | ADAPTER | 52 | COIL SPRING |
| 23 | UPPER LEG OF ADAPTER | 53 | MAGNET |
| 23b | UNDER SURFACE OF UPPER LEG, #23 | 54 | CIRCUIT BOARD |
| 24 | HOLE THRU 23 | 55 | BATTERY |
| 25 | LOWER LEG OF ADAPTER, #22 | 56 | SWITCH |
| 26 | HOLE THRU LOWER LEG, #25 | 57 | ANTENNA CIRCUIT (Fig. 6) |
| 28 | LEADING EDGE OF ADAPTER | 59 | SILICONE POTTING COMPOUND |
| 29 | HOLE IN ADAPTER FOR ATTACHMENT OF TOOTH | 60 | SIGNALS |
| 30 | PIN THRU HOLE, #29 | 62 | RECEIVER |
| 32 | TOOTH | 65 | AUDIBLE ALARM DEVICE |
| 33 | UPPER LEG OF TOOTH, #32 | | |
| 34 | LOWER LEG OF TOOTH, #32 | | |
| 40 | HOUSING TRANSDUCER FOR ASSEMBLY | | |
| 41 | OUTER STEEL CAN OF ASSEMBLY #40 | | |
| 42 | ALUMINUM (INNER) CAN OF ASSEMBLY, #40 | | |